

Remarks/Arguments

Claims 1, 2, 4-14, 16-19, and 21 are now pending in this application. In the June 22, 2007 Office Action (hereinafter "Final Office Action"), Claims 1, 2, 4, 9, 10, 11, 12, 13, 14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartung et al., U.S. Patent No. 5,920,709 (hereinafter "*Hartung*"). Claims 5, 6, 7, 8, 16, 17, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Hartung* and further in view of Nakamura, U.S. Patent No. 7,046,519 (hereinafter "*Nakamura*").

For the reasons set forth below, the applicants respectfully request reconsideration and immediate allowance of this application.

Claim Rejections Under 35 U.S.C. 102(b)

In the Final Office Action, claims 1, 2, 4, 9, 10, 11, 12, 13, 14 and 19 were rejected under 35 U.S.C. 102(b) as being anticipated by *Hartung*. The rejections are respectfully traversed.

Claim 1

Claim 1 recites, *inter alia*, "reading the drive head register destination; [and] detecting whether the data read from the drive head register destination matches the data written to the drive head register destination." The Final Office Action alleges that *Hartung* at col. 11, lines 37-55 anticipates the recited portion of claim 1. The applicants respectfully disagree.

Hartung at col. 11, lines 32-42 discloses:

After system start, at step 902 nest driver 230 checks for connection of an IDE device by issuing a suitable command to each of the IDE host adapters 63A-63D. Issuance of a command occurs by nest driver 230 causes a particular one of a set of command values to be loaded into CommandReg register 78K of image file 76 of FIG. 6. Microprocessor 62 then outputs the instruction in CommandReg register 78K to buses 60A-60D. In response to issuance of the command at step 902, nest driver 230 examines returned values on each of IDE buses 60A-60D to determine whether a "signature" indicative of an IDE device has been returned.

The above quoted portion of *Hartung* discloses the operation of the nest driver. In particular, the nest driver checks whether an IDE device is connected by issuing commands to IDE host adapters. The issued commands cause certain values to be loaded into the CommandReg Register. The microprocessor outputs the instruction in the CommandReg register into a bus. The values returned on the bus are compared with a signature.

Nothing in *Hartung* discloses comparing the data written into the CommandReg Register with the data read from the CommandReg Register. Instead, *Hartung* discloses that data read from the CommandReg Register is compared with a signature. Comparing the data read from the drive head register destination with the data written to the drive head register destination, as essentially claimed in claim 1, is patentably distinguishable from comparing the data read from the drive head register destination with a signature. As an example, claim 5 of the instant application recites “detecting whether data read from the cylinder low register destination and the cylinder high register destination matches a predefined signature.”

Claim 1 further recites, *inter alia*, “in response to the data read from the drive head register destination matching the data written to the drive head register destination, reading the status register destination.” As mentioned above, *Hartung* discloses comparing the values read from the CommandReg register and comparing those values with a signature. *Hartung* at col. 42-45 further discloses:

If nest driver 230 sees a string of hexadecimal "F" values on any of IDE buses 63, nest driver 230 realizes that no device is connected to such bus 63. If nest driver 230 sees a value corresponding to an "Abort" command on any of IDE buses 63, nest driver 230 realizes that the device connected to that bus is not an IDE/ATAPI device. If, on the other hand, nest driver 230 sees a hexadecimal value "EB14" being returned via any bus 63 through the ByteCntReg register 78F in image 76, nest driver 230 knows that an IDE/ATAPI device is connected to that bus 63.

The above quoted portion of *Hartung* discloses the meaning of various signatures. In particular, hexadecimal F values indicate that no device is connected to the bus. An “Abort” command value indicates a connected device that is not an IDE/ATAPI device. A hexadecimal EB14 value indicates a connected device that is an IDE/ATAPI device.

Of importance here are the hexadecimal F values indicating that no device is connected. Nothing in *Hartung* discloses “reading the status register destination,” as recited in claim 1, in response to detecting that the values in the CommandReg register are hexadecimal F values (i.e., no device is connected).

The Final Office Action additionally relies on *Hartung* at col. 9, line 64-col. 10, line 5, which simply discloses a list of registers of an image of a device task file. This list of registers provides no additional disclosure to cure the deficiencies described above, namely, that *Hartung* does not disclose “in response to the data read from the drive head register destination matching the data written to the drive head register destination, reading the status register destination,” as recited in claim 1.

Accordingly, *Hartung* does not teach, suggest, or describe each and every element of independent claim 1. The applicants therefore submit that this claim is in condition for immediate allowance. The applicants further submit that claims 2 and 4-13 are also patentable because they contain recitations not taught by *Hartung* and because these claims depend from allowable independent claim 1. Accordingly, the applicants submit that claims 1-2 and 4-13 are in condition for immediate allowance.

Claim 14

Claim 14 recites, *inter alia*, “select the IDE drive for detection by writing data to a drive head register destination for the IDE drive wherein the data includes the drive selection value established for the IDE drive.” Regarding the “drive selection value,” the Final Office Action relies on *Hartung* at col. 5, lines 25-30, which discloses that a device inserted into the nest is initialized as a master or slave. However, *Hartung* does not disclose the “drive selection value.” Further, nothing in *Hartung* discloses writing data including the drive selection value into a drive head register destination, as essentially claimed in claim 14.

As described above with respect to claim 1, *Hartung* discloses issuing commands that cause certain values to be loaded into the CommandReg Register. *Hartung* provides absolutely no disclosure indicating that the values loaded into the CommandReg Register include the recited “drive selection value.”

Accordingly, *Hartung* does not teach, suggest, or describe each and every element of independent claim 14. The applicants therefore submit that this claim is in condition for immediate allowance. The applicants further submit that claims 16-18 are also patentable because they contain recitations not taught by *Hartung* and because these claims depend from allowable independent claim 14. Accordingly, the applicants submit that claims 14 and 16-18 are in condition for immediate allowance.

Claim 19

Claim 19 recites, *inter alia*, “a basic input/output system program capable of being executed on the processor and, when executed on the processor, operative to” perform a number of operations. The Final Office Action relies on *Hartung* at col. 10, lines 6-13, which discloses a virtual machine manager of an operating system. The virtual machine manager appears entirely

unrelated to claim 19. In particular, the recited portion of *Hartung* provides absolutely no disclosure of a BIOS operative to perform the claimed operations.

Accordingly, *Hartung* does not teach, suggest, or describe each and every element of independent claim 19. The applicants therefore submit that this claim is in condition for immediate allowance. The applicants further submit that claim 21 is also patentable because it contains recitations not taught by *Hartung* and because this claim depends from allowable independent claim 19. Accordingly, the applicants submit that claims 19 and 21 are in condition for immediate allowance.

Claim Rejections Under 35 U.S.C. 103(a)

In the Final Office Action, claims 5, 6, 7, 8, 16, 17, 18 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Hartung* and further in view of *Nakamura*, U.S. Patent No. 7,046,519. As previously mentioned, these claims are believed to be allowable as depending from allowable base claims. These claims are also allowable for the following additional reasons.

Claims 5, 16 and 21

Claim 5 recites, *inter alia*, “in response to the data read from cylinder low register destination and the cylinder high register destination matching the predefined signature, returning that the IDE drive is connected to the intelligent drive electronics channel.” The Final Office Action relies on *Nakamura* at col. 8, lines 52-64, which simply discloses a list of registers including a cylinder low register and a cylinder high register. *Nakamura* provides no additional relevant disclosure related to the claim 5. In particular, *Nakamura* provides no teaching or suggestion of comparing data read from the cylinder low and cylinder high registers with a predefined signature.

The Final Office Action states that it “simply relies on the secondary reference in terms of installing *Nakamura*’s cylinder low and high registers in place of *Hartung*’s set of registers.” (Final Office Action at p. 7). The flaw in this argument is that it assumes, without any objective basis, that expressly distinct registers can be interchanged. This effectively ignores the disclosures of the prior art, which distinguish between registers (i.e., different registers are referred to with different names), as well as the instant claims, which also recite different

registers. In particular, different data may be stored in different registers depending on the purpose of the particular registers. Claim 5 recites utilizing the cylinder low and cylinder high registers to determine whether the IDE drive is connected to the intelligent drive electronics channel. That is simply not taught by *Hartung* or *Nakamura*, alone or in combination.

Accordingly, *Hartung* and *Nakamura*, alone or in combination, do not teach, suggest, or describe each and every element of claim 5. Further, for the same reasons described above, *Hartung* and *Nakamura*, alone or in combination, do not teach, suggest, or describe each and every element of claims 16 and 21. The applicants therefore submit that these claims are in condition for immediate allowance.

Conclusion

In view of the foregoing amendment and remarks, the applicants respectfully submit that all of the pending claims in the present application are in condition for allowance. Reconsideration and reexamination of the application and allowance of the claims at an early date is solicited. If the Examiner has any questions or comments concerning this matter, the Examiner is invited to contact the applicants' undersigned attorney at the number below.

Respectfully submitted,

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